

**STANDARD MODIFICATION
E 36****01/27/07****Changing "Approved Products List" to "Qualified Products List"**

101-1.03 DEFINITIONS. Add the following definition: **QUALIFIED PRODUCTS LIST.** A list of companies and products that the Department has found conforms to the SSHC.

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. In fifth paragraph, in two places remove the text: "Approved Products List" and replace with: Qualified Products List

508-2.01 MATERIALS. In paragraph titled Membrane Material, remove the text: "Approved Products List" and replace with: Qualified Products List

660-2.01 MATERIALS. Under Item 1.a. change title by removing: "Materials on the Approved Products List;" and replace with: Materials on the Qualified Products List.

660-2.01 MATERIALS. Under Item 1.b. change title by removing: "Materials Not on the Approved Products List;" and replace with: Materials Not on the Qualified Products List.

661-2.01 MATERIALS. Under Item 1. change title by removing: "Materials on the Approved Products List;" and replace with: Materials on the Qualified Products List.

661-2.01 MATERIALS. Under Item 2. change title by removing: "Materials Not on the Approved Products List;" and replace with: Materials Not on the Qualified Products List.

INDEX Remove the text: "Approved Products List" and replace with: Qualified Products List

**STANDARD MODIFICATION
E 22****1/01/06****SECTION 101****DEFINITIONS AND TERMS**

101-1.03 DEFINITIONS. Delete definition of SUBGRADE and replace with:
SUBGRADE. The soil or embankment upon which the pavement structure is constructed.

**STANDARD MODIFICATION
E 32****01/27/07****SECTION 101****DEFINITIONS AND TERMS**

101-1.03 DEFINITIONS, PLANS. Delete text of PLANS and replace with: The Department's contract drawings, profiles, typical cross sections, standard drawings, and supplemental drawings or reproductions showing the location, character, dimensions, and details of the work.

**STANDARD MODIFICATION
E 23****1/01/06****SECTION 102****BIDDING REQUIREMENTS AND CONDITIONS****102-1.04 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND WORK SITE.**

Delete the second paragraph and replace with:

The records of geotechnical investigations including boring logs, test results, geology data reports, soil reports, material site reports, and geotechnical reports included in a bid package or made accessible to bidders or contractors, are for information purposes only. These records are not part of the Contract. These records indicate subsurface conditions only at specific locations and times, and only to the depths penetrated. They do not necessarily reflect variations in soil, rock or groundwater conditions that may exist between or outside such locations. Actual conditions may differ from what is shown in the records. Material sources referenced in these records may not contain materials of sufficient quantity or quality to meet project requirements. The accessibility of these records does not constitute approval, nor guarantee suitability of soils or sources, or the rights to use sources for this project, except as specifically provided in Subsections 106-1.02.4.b Mandatory Sources and 106-1.02.4.c Designated Sources. The records shall not substitute for independent investigation, interpretation, or judgment of the bidder or contractor. The Department is not responsible for any interpretation or conclusion drawn from its records by the bidder or Contractor.

Bidders and contractors shall examine Subsection 106-1.02 Material Sources for further information about material source development.

**STANDARD MODIFICATION
E 18****06/30/04****SECTION 102****BIDDING REQUIREMENTS AND CONDITIONS**

102-1.05 PREPARATION OF BID. Modify the second sentence in the third paragraph, after: "If a bidder is a corporation, the bid must be signed by a corporate officer" add: or agent

**STANDARD MODIFICATION
E 65****2/23/09****SECTION 103****PERFORMANCE AND PAYMENT BONDS**

Delete Subsection 103-1.05 and replace with the following:

103-1.05 PERFORMANCE AND PAYMENT BONDS. The successful bidder shall furnish all required Performance and Payment Bonds on forms provided by the Department for the sums specified in the Contract. If no sum is specified, the successful bidder shall comply with AS 36.25.010. The Surety on each bond may be any corporation or partnership authorized to do business in the state as an insurer under AS 21.09 or two individual sureties approved by the Contracting Officer.

If individual sureties are used, two individual sureties must each provide the Department with security assets located in Alaska equal to the penal amount of each bond. Any costs incurred by the Contractor and the individual Surety are subsidiary and shall be borne by the Contractor or the individual Surety. In no event will the Department be liable for these costs.

Individual sureties shall provide security by one, or a combination, of the following methods:

1. Escrow Account, with a federally insured financial institution, in the name of the Department. Acceptable securities include, but are not limited to, cash, treasury notes, bearer instruments having a specific value, or money market certificates.
2. Irrevocable letters of credit, with a financial institution approved by the Contracting Officer.
3. Cashier's or certified check made payable to the State of Alaska issued by financial institutions approved by the Contracting Officer.

These bonds and security assets, as applicable, shall remain in effect for 12 months after the date of final payment or, if longer, until all obligations and liens under this Contract are satisfied, including, but not limited to, obligations under Subsection 107-1.19.

The Department may, in its discretion, notify the bonding company or Surety of any potential default or liability.

The Contractor shall substitute, within five working days, another bond or surety acceptable to the Department if an individual Surety or the Surety on any bond furnished in connection with the Contract:

1. Becomes insolvent or is declared bankrupt;
2. Loses its right to do business in any state affecting the work;
3. Ceases to meet Contract requirements;
4. Fails to furnish reports of financial condition upon request; or
5. Otherwise becomes unacceptable to the Department.

When approved by the Contracting Officer, the Contractor may replace:

1. An individual surety with a corporate surety; or
2. Posted collateral with substitute collateral.

Failure to maintain the specified bonds or to provide substitute bonds when required under this section may be grounds for withholding contract payments until substitute bonding is obtained, and may, in the Department's discretion, be grounds for declaring the Contractor in default.

**STANDARD MODIFICATION
E 58**

07/28/07

SECTION 104

SCOPE OF WORK

104-1.01 INTENT OF CONTRACT. *Add to the end of this subsection:*

The Contractor is responsible for the means, methods, techniques, sequence, or procedures of construction, safety, quality control, and to perform or furnish the work in accordance with the Contract documents.

**STANDARD MODIFICATION
E 33****01/27/07****SECTION 105****CONTROL OF WORK**

105-1.02 PLANS AND WORKING DRAWINGS. In Third paragraph delete: “(24”x36”) and replace with: (22”x34”)

105-1.03 CONFORMITY WITH PLANS AND SPECIFICATIONS. In first sentence of first paragraph after: “Work performed and materials furnished shall conform to the Plans and Specifications” add: and approved Working Drawings,

In first sentence of second paragraph after: “All work or material not conforming to the Plans and Specifications” add: and approved Working Drawings,

105-1.13 MAINTENANCE DURING CONSTRUCTION. Add the following at the end of this subsection:
All costs of maintenance work during construction and before the project is accepted as substantially complete shall be subsidiary to the prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

If in the Engineer’s opinion, the Contractor at any time fails to provide adequate maintenance, the Engineer will notify the Contractor of such noncompliance. The notification will specify the areas or structures for which there is inadequate maintenance, the corrective maintenance required, and the time allowed to complete corrective maintenance. If the Contractor fails to take the corrective action within the specified time, the Engineer may:

1. Suspend the work until corrective maintenance is completed;
2. Assess a traffic price adjustment against the Contract Amount when an adjustment rate is specified in the Contract; and
3. Employ others for corrective maintenance and deduct the cost from the Contract amount.

Add the following Subsection 105-1.18:

105-1.18 RESERVED FOR WARRANTIES.

**STANDARD MODIFICATION
E 59****07/28/08****SECTION 105****CONTROL OF WORK**

105-1.15 PROJECT COMPLETION. In second paragraph, second sentence delete: “Subsection 621-3.04” and replace with: Subsections 618-3.06 and 621-3.04

In third paragraph, first sentence, delete: “Subsection 621-3.04” and replace with: “Subsections 618-3.06 and 621-3.04

**STANDARD MODIFICATION
E 19****06/30/04****SECTION 105****CONTROL OF WORK**

105-1.16 FINAL ACCEPTANCE AND RECORD RETENTION. Modify the first paragraph, Item 4., after: "DOLWD" add: and State Department of Revenue

**STANDARD MODIFICATION
E 24****1/01/06****SECTION 106****CONTROL OF MATERIAL****106-1.02 MATERIAL SOURCES.****1.a. General.** Within Item a. delete text and replace with:

Utilize Useable Excavation according to Subsection 104-1.04 before using material sources listed in Subsection 106-1.02.4. When there is insufficient useable excavation furnish additional required materials from sources of the Contractor's choice, except that the Contractor shall use a mandatory source when identified in the Contract;

4. Type of Sources. Delete the first paragraph and replace with:

The Contractor shall utilize Useable Excavation according to Subsection 104-1.04 before using material sources listed in this Subsection. When there is insufficient Useable Excavation, the Contractor shall furnish additional required materials from sources of the Contractor's choice, except that the Contractor shall use a mandatory source when identified in the Contract.

When there is insufficient Useable Excavation, the Contractor shall supply additional required material from the following sources:

4.d. Available Sources. Delete the second paragraph and replace with:

When the Department furnishes copies of existing boring logs, test results, or other data in its possession concerning Available Sources, the Contractor is responsible for determining the accuracy and completeness of this data, for any assumptions the Contractor makes based on this data, and for exploring all Available Sources to the Contractors satisfaction.

4.e. Excluded Material Sources. Delete the paragraph and replace with:

Some material sources may not be considered acceptable regardless of location or ownership. The bid documents may identify some material sources excluded from use. The Department reserves the right to exclude any material source or any portion of a material source, at any time after Contract award, that is determined by material testing to be unsuitable for use on the project.

**STANDARD MODIFICATION
E 34****01/27/07****SECTION 106****CONTROL OF MATERIAL***Add New Subsection 106-1.08:*

106-1.08 SUBMITTAL PROCEDURE. The Contractor shall complete a Submittal Register, and shall submit it to the Engineer on forms provided by the Department. The intent of the Submittal Register is to provide a blueprint for the smooth flow of specified project documents. The Contractor shall fill it out sequentially by bid item and allow at least three spaces between bid items. The Submittal Register shall list all working drawings, schedules of work, and other items required to be submitted to the Department by the Contractor including but not limited to: Progress Schedule, anticipated dates of material procurement, Construction Phasing Plan, Traffic Control Plan, Storm Water Pollution Prevention Plan, Quality Control Program, Utility Progress Schedule, Blasting Plan, Mining Plan, annual EEO reports, DBE payment documentation and subcontracts.

The Contractor shall submit materials (product) information to the Engineer for review, as required by the Materials Certification List and the Contract.

The number of copies required for submittals may be included in the specifications for individual bid items. If the number of copies of a submittal is not otherwise specified, three copies shall be required. On each sheet submitted to the Department, including working drawings, catalog cuts, manufacturer's certifications, etc., space shall be provided for Contractor and Department review stamps.

Each copy of each submittal shall include a Submittal Summary sheet. The Contractor may use forms provided by the Department or a similar form of the Contractor's choice as approved by the Department. The Contractor shall sign submittals and submit them to the Engineer. The Department will review submittals within 30 days after they are received. The Department will return submittals to the Contractor as either: approved, conditionally approved with the conditions listed, or rejected with the reasons listed. The Contractor may resubmit a rejected submittal to the Engineer with more information or corrections. The Department will review resubmittals within 30 days after they are received.

The Contractor shall not order material or use working drawings that have not been approved by the Department. The Contractor shall be responsible for timely submittals. Failure by the Department to review submittals within the time given may be the basis for a request for extension of Contract time but not for additional compensation.

Payment for a specific contract item will not be made until the Department has received the Submittal Register for all items and approved all required submittals for that specific contract item.

When material invoices, freight bills and mill certificates are submitted, they shall provide sufficient information for the Engineer to identify the date, company and location of invoice (bill, certificate); project name and number where material will be incorporated; manufacturer, product number, quantity and cost.

Add the following Subsection 106-1.09:

106-1.09 RESERVED.

**STANDARD MODIFICATION
E 35****01/27/07****SECTION 107****LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC****107-1.11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. Add the following paragraphs:**

7. Restoring Areas. Areas used by the Contractor, including haul routes, shall be restored to their original condition after the Contractor's operations are completed. The original condition of an area shall be determined as follows: Prior to commencement of operations, the Engineer and the Contractor shall inspect each area and haul route that will be used by the Contractor and take photographs to document their condition. After construction operations are completed, the condition of each area and haul route will be compared to the earlier photographs. Prior to demobilization the Contractor shall repair damages attributed to its operations. The Contractor agrees that all costs associated with repairs shall be subsidiary to other items of work and will not be paid for directly.
8. Material Disposal Sites. Offsite disposal areas may be at locations of the Contractor's choice, provided the Contractor obtains from the owner of such land written permission for such dumping and a waiver of all claims against the State for any damage to such land which may result therefrom, together with all permits required by law for such dumping. A copy of such permission, waiver of claims, and permits shall be filed with the Engineer before commencing work on private property. The Contractor's selected disposal sites shall also be inspected and approved by the Engineer prior to use of the sites.

**STATEWIDE SPECIAL PROVISION
ES 16****04/27/09****SECTION 107-1.05****FEDERAL AID PROVISIONS**

Add the following after paragraph two:

Monthly Employment Reports. Submit Monthly Employment Reports on Form 25D-1589. The Contractor shall submit both a hard copy with signed certification statement, and an electronic file copy in excel spreadsheet format, to the Engineer.

Each Monthly Employment Report is due at 5:00 pm five calendar days after the last Friday of the reporting month.

For each occurrence where a Monthly Employment Report is not submitted on or before the due date, the Department will deduct liquidated damages from the monies owed the Contractor in the amount of twenty-five hundred dollars (\$2,500). In addition to any damages for failure to report on-time, the Department will withhold one hundred percent (100%) of payment for all progress payments due the Contractor, until all Monthly Employment Reports which are due but have not been submitted are complete and delivered to the Project Engineer. No interest will be paid on amounts withheld due to Contractor's failure to submit Monthly Employment Reports on time and as required in this subsection.

Submit Monthly Employment Reports that include:

- Contractor's name and address.
- Reported Month: *mm/yyyy*.

- Certification Statement:

"Any intentional misrepresentation or omission made in connection with the attached Monthly Employment Report may be cause for suspension, a determination of non-responsibility on future bids, and may be cause for revocation of award, default, or debarment. The person or entity making the false statement or omission is subject to any and all civil and criminal penalties available pursuant to applicable state and federal law.

I certify the information contained in the attached Monthly Employment Report is true, correct, and complete. (Signature and printed name of the person preparing the Monthly Employment Report, and Date)"

Each month the Contractor shall provide all information required by the Form 25D-1589. Each Form 25D-1589 Monthly Employment Report shall include:

- Report Month: *the month and year covered by the report, as mm/yyyy. The reporting month includes the Saturday following the last Friday of the preceding month to and including the last Friday of the reporting month.*
- Contracting Agency: *"State"*
- Federal-Aid Project Number: *the federal-aid project number included on the title sheet of the plans.*
- State Project Number: *the AKSAS project number included on the title sheet of the plans.*
- Project Location: *"Alaska"*
- Contractor Name and Address: *The name and address of the Contractor, including street address, city, state, and zip code.*
- Contractor DUNS Number: *The Contractor's unique nine-digit number issued by Dun & Bradstreet. Followed by the optional 4 digit DUNS Plus number.*
- Employment Data: *The Contractor shall report the direct, on-the-project jobs for their workforce , and the workforce of all subcontractors, lower tier subcontractors, and owner-operators active during the reporting month. These jobs include all workers actively engaged in work on the jobsite or actively engaged in work directly related to the project occurring in the project office, in the home office or telework from a home or other alternative office location. This also includes any engineering personnel, inspectors, sampling and testing technicians, and lab technicians performing work directly in support of the project. This does not include material fabricator's, material suppliers such as steel, culverts, guardrail, and does not include engineering personnel, inspectors, sampling and testing technicians, and lab technicians employed by the Department or the Department's consultant. The form requests specifically:*
 - Subcontractor Name: *The name of each subcontractor, lower tier subcontractor, and owner-operator that was active on the project for the reporting month.*
 - Employees: *The number of project employees on the Contractor's workforce each month, and the number of project employees for each of the active subcontractors, lower tier subcontractors, and owner-operators for the reporting month. Do not include material suppliers.*
 - Hours: *The total hours on the specified project for all employees reported on the Contractor's project workforce that month, and the total hours for all project employees reported for each of the active subcontractors, lower tier subcontractors, and owner-operators that month.*
 - Payroll: *The total dollar amount of wages paid by the Contractor that month for employees on the project, and the total dollar amount of wages paid by each of the active*

subcontractors, lower tier subcontractors, and owner-operators that month. Payroll includes wages only, and does not include overhead or indirect costs.

- Prepared by:
 - Name: *The person responsible for preparation of the form and their job title.*
 - Date: *The date that the Contractor completed the employment form. Reported as mm/dd/yyyy.*

ARRA Required Contract Provisions

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 requires that each contract awarded using ARRA funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

- (1) examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and*
- (2) interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.”*

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

Section 1515(a) of the ARRA provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

The Contractor shall insert, in each subcontract, all of the stipulations contained in these ARRA Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The ARRA Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor, lower tier subcontractor, and owner-operator, with these ARRA Required Contract Provisions.

**STANDARD MODIFICATION
E 11**

10/15/07

SECTION 108

PROSECUTION AND PROGRESS

108-1.01 SUBLETTING OF CONTRACT. Delete paragraph one and replace with the following: The Contractor shall submit a Contractor Self Certification for Subcontractors and Lower Tier Subcontractors, Form 25D-042, before the Contractor or any subcontractor sublets, sells, transfers, assigns, or otherwise disposes of the Contract or any portion of the Contract. The Department has authority to review subcontracts and to deny permission to sublet work. The Department may penalize the Contractor for false statements or omissions made in connection with Form 25D-042.

Delete paragraph four and replace with the following:

1. The Contractor shall ensure that for all subcontracts (agreements):
 - a. The Department is furnished with one completed Contractor Self Certification, Form 25D-042, for each subcontract;

- b. The subcontractors have submitted a Bidder Registration, Form 25D-6;
- c. The required prompt payment provisions of AS 36.90.210, as well as other items listed in Form 25D-042, are included in the subcontracts;
- d. The subcontractors pay current prevailing rate of wages as per Subsection 107-1.04 and file certified payrolls with the Engineer and DOLWD for all work performed on the project; and
- e. Upon receipt of a request for more information regarding subcontracts, the requested information is provided to the Department within 5 calendar days.

STANDARD MODIFICATION
E 11

06/30/04

SECTION 109

MEASUREMENT AND PAYMENT

109-1.08 FINAL PAYMENT. *Add the following sentence to the first paragraph:*

The Department will not process the final estimate until the Contractor completes Items 1 through 4 in the first paragraph of Subsection 105-1.16.

STANDARD MODIFICATION
E 37

01/27/07

SECTION 204

STRUCTURE EXCAVATION FOR CONDUITS
AND MIINOR STRUCTURES

204-3.01 CONSTRUCTION REQUIREMENTS. *In first sentence of paragraph four, delete: "bedding and"*

STANDARD MODIFICATION
E 49

05/01/07

SECTION 205

EXCAVATION, BACKFILL, AND
FOUNDATION FILL FOR MAJOR STRUCTURES

205-3.01 EXCAVATION. *Within Item 3 Cofferdams, second paragraph, delete the first sentence and replace with:*

Submit detailed working drawings showing proposed method of cofferdam construction, designed by a person proficient in cofferdam design. The working drawings must be stamped with the seal of, dated by, and signed by a Professional Engineer registered in the State of Alaska.

**STANDARD MODIFICATION
E 50****05/01/07****SECTION 401****ASPHALT CONCRETE PAVEMENT****401-2.01 COMPOSITION OF MIXTURE - JOB MIX DESIGN.** Delete the last paragraph titled Contractor Mix Design and replace with:

Contractor Mix Design. If a bid item for Job Mix Design, Item 401(8), appears in the Contract, perform a Job Mix Design following the requirements specified above. The Job Mix Design must be stamped with the seal of, dated by, and signed by a Professional Engineer registered in the State of Alaska. Furnish the Job Mix Design to the Engineer at least 15 working days before the production of asphalt concrete mixture. Submit samples to the Engineer, upon request, for Job Mix Design verification testing. Do not produce asphalt concrete mixture for payment until the Job Mix Design is approved.

**STANDARD MODIFICATION
E 38****01/27/07****SECTION 401****ASPHALT CONCRETE PAVEMENT**

401-3.03 ASPHALT MIXING PLANT. Add the following to the end of the second paragraph: Provide a tap on the asphalt cement supply line just before it enters the plant (after the 3-way valve) for sampling asphalt cement.

401-3.07 PREPARATION OF EXISTING SURFACE. In second paragraph delete: "sawcut pavement, cold joints,"

401-3.09 PREPARATION OF AGGREGATES. In first paragraph delete: "WAQTC TM 6" and replace with: WAQTC FOP for AASHTO T 329

401-3.14 JOINTS. Add the following as the sixth paragraph: For joints below the final layer, uniformly coat the joint surface with tack coat before placing any fresh asphalt concrete mixture against the joint. For joints in the final layer, uniformly coat the joint surface with joint adhesive before placing any fresh asphalt mixture against the joint. Apply joint sealant in a 12 inch wide strip centered over joints in the final layer of asphalt concrete mixture while the asphalt is still clean, free of moisture, and before striping. Use Crafcro Pavement Joint Adhesive No. 34524 or Deery Cold Joint Adhesive, and use Asphalt Systems GSB-78 joint sealant, or approved equal. All costs associated with joint preparation, applying joint sealant, and applying joint adhesive are subsidiary to the asphalt concrete pay item.

**STANDARD MODIFICATION
E 02****07/03/03****SECTION 401****ASPHALT CONCRETE PAVEMENT**

401-3.13 COMPACTION. Add the following to the end of the first paragraph: Compact asphalt concrete mixture immediately after it is placed and spread, and as soon as it can be compacted without undue displacement, cracking or shoving. Perform initial breakdown compaction while the asphalt concrete surface mixture temperature is greater than 235°F and finish compaction before the surface temperature reaches 150°F.

Delete and Replace Subsection 401-3.15 heading with:

401-3.15 SURFACE REQUIREMENTS AND TOLERANCE. Add the following paragraphs:

The finished surface of asphalt concrete paving shall match dimensions shown on the Plans for horizontal alignment and width, profile grade and elevation, crown slope, and paving thickness. Water shall drain without puddles, across the pavement surface. The surface shall be of uniform texture and without ridges, humps, depressions, and roller marks. The surface shall be free of raveling, cracking, tearing, rutting, asphalt cement bleeding, and aggregate segregation. The asphalt concrete mixture shall be free of foreign material, uncoated aggregate and oversize aggregate.

Any finished surface area that does not meet the requirements of this Subsection is deemed unacceptable as per Subsection 105-1.11. The Engineer will determine whether the unacceptable asphalt concrete mixture shall either be corrected, or removed and replaced. Submit correction methods to the Engineer for approval prior to correction work commencing.

Add Subsection 401-3.17:

401-3.17 TEMPERATURE REQUIREMENTS. The Engineer may reject asphalt concrete mixture that is mixed, hauled, spread and placed, or compacted at a temperature outside the temperature range determined by either the Job Mix Design, by a control test strip, or by the Specifications. Rejected asphalt concrete mixture is deemed unacceptable as per Subsection 105-1.11. The Engineer will determine whether the unacceptable asphalt concrete mixture shall either be corrected, or removed and replaced.

At the Engineer's discretion, the Contractor may be allowed to compact asphalt concrete mixture that is already placed and spread but is outside the temperature range. If the compacted asphalt concrete mixture fails the Engineer's tests for acceptance, it must be removed and replaced as per Subsection 105-1.11.

401-4.02 ACCEPTANCE SAMPLING AND TESTING. Delete fifth and sixth paragraph and replace with the following:

For contract quantity of less than 1,500 tons (and for temporary pavement), asphalt concrete pavement will be accepted for payment when the following requirements are met:

1. The Engineer approves a Job Mix Design.
2. Asphalt concrete paving mixture complies with approved Job Mix Design.
3. Final pavement thickness matches plans, and final density matches specifications.
4. Final pavement surface meets requirements of Subsection 401-3.15.

The Engineer reserves the right to perform any testing required in order to determine acceptance. If calibrated test equipment is not available, asphalt content of the mix may be determined by extraction in accordance with AASHTO T 164. When testing is required in order to determine acceptance, at least two tests shall be taken for each approved mix design.

If asphalt concrete pavement fails to meet the requirements of this Subsection, the Engineer may determine a price reduction for asphalt as per 105-1.03; or the Engineer may direct you either to correct, or to remove and replace the unacceptable area as per Subsection 105-1.11.

401-5.01 BASIS OF PAYMENT. Fourth paragraph, Item 1 delete "5000" and replace with: 1500

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05/01/07

SECTION 401

ASPHALT CONCRETE PAVEMENT

Add the following:

401-5.02 ASPHALT MATERIAL PRICE ADJUSTMENT.

Asphalt Material Price Adjustment. This subsection provides a price adjustment for asphalt material by: (1) additional compensation to the contractor or (2) a deduction from the contract amount.

1. This provision shall apply to asphalt material meeting the criteria of Section 702, and is included in items listed in the bid schedule of Sections 306, 307, 308, 401 thru 405, 608, and 609.
2. This provision shall only apply to cost changes in asphalt material that occur between the date of bid opening and the date the asphalt material is incorporated into the project.
3. The asphalt material price adjustment will only apply when:
 - a. There is more than 500 tons of asphalt material in the bid schedule of Sections described in Item 1; and
 - b. There is more than a seven and one half percent (7.5%) increase or decrease in the Alaska Asphalt Material Price Index, from the date of bid opening to the date the asphalt material is incorporated into the project.
4. As used in this Subsection, the Alaska asphalt material price index is calculated bi-monthly on the first and third Friday of each month, and will remain in effect from the day of calculation until the next bi-monthly calculation. The Alaska asphalt material price index is posted on the Department's Statewide Materials website, and calculated according to the formula posted there.
5. Price adjustment will be cumulative and calculated with each progress payment. Use the price index in effect on the last day of the pay period, to calculate the price adjustment for asphalt material incorporated into the project during that pay period. The Department will increase or decrease payment under this contract by the amount determined with the following asphalt material price adjustment formula:

For an increase exceeding 7.5%, additional compensation = $[(IPP - IB) - (0.075 \times IB)] \times Q$
 For a decrease exceeding 7.5%, deduction from contract = $[(IB - IPP) - (0.075 \times IB)] \times Q$

Where:

Q = Quantity of Asphalt Material incorporated into project during the pay period, in tons
 IB = Index at Bid: the Bi-monthly Alaska asphalt material price index in effect on date of bid, in dollars per ton
 IPP = Index at Pay Period: the Bi-monthly Alaska asphalt material price index in effect on the last day of the pay period, in dollars per ton

6. Method of measurement for determining Q (quantity) is the weight of asphalt material that meets the criteria of this subsection and is incorporated into the project. The quantity does not include aggregate, mineral filler, blotter material, thinning agents added after material qualification, or water for emulsified asphalt.
7. Basis of payment is:

401(10) Asphalt Material Price Adjustment	Contingent Sum
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**STANDARD MODIFICATION
E 39**

01/27/07

SECTION 504

STEEL STRUCTURES

504-3.01 FABRICATION. *Delete subsection 8 in its entirety and replace with the following:*

8. Welding. Perform all welding and Nondestructive Examination (NDE) as specified or shown on the Plans. Conform to the ANSI/AASHTO/AWS *Bridge Welding Code* D1.5 when welding new steel

bridge girders, beams and stringers. Conform to the *Structural Welding Code AWS D1.1* when welding all other steel structures.

At least 30 days prior to welding, submit for approval a welding plan that has been signed and stamped by a Certified Welding Inspector (CWI) responsible for Quality Control (QC) and consisting of the following documents:

- a. Quality Control personnel qualifications listing CWI number;
- b. Welding Procedure Specifications (WPS) using forms in AWS D1.1, Sample Welding Forms;
- c. Procedure Qualification Records (PQR) when applicable, using forms in AWS D1.1, Sample Welding Forms;
- d. Welder Performance Qualification Records (WPQR) using forms in AWS D1.1, Sample Welding Forms with the documentation of current welder certification;
- e. Sample daily inspection sheet; and
- f. Type and extent of NDE to be conducted, as required in the specifications.

Perform all Quality Control inspection necessary to ensure the materials and workmanship meet the requirements of the contract documents. Use a CWI for welding inspection.

Correct all deficiencies in materials and workmanship revealed by Quality Control and Quality Assurance inspections without additional compensation.

Furnish all completed Quality Control inspection documents to the Engineer and to the Quality Assurance representative designated by the State (when designated).

Meet Charpy V-notch impact test requirements as shown on the Plans and according to Sections 715 and 716; except that the impact energy values for filler metals must not be less than that of the base metals to be joined, when tested at the same temperature as the base metal.

**STANDARD MODIFICATION
E 12**

06/30/04

SECTION 507

BRIDGE RAILING

507-2.01 MATERIALS. Add the following: Grout

Section 701-2.03

**STANDARD MODIFICATION
E 51**

05/01/07

SECTION 512

FORMS AND FALSEWORK

512-3.01 DRAWINGS. Delete Item 5 and replace with:

5. Provide design calculations and working drawings for proposed bridge falsework. Show the stresses and deflections in load supporting members in the falsework design calculations. Use a person proficient in falsework design to perform the work. The design calculations and working drawings must be stamped with the seal of, dated by, and signed by a Professional Engineer registered in the State of Alaska.

**STANDARD MODIFICATION
E 60****07/28/08****SECTION 520****TEMPORARY CROSSINGS**

520-1.01 DESCRIPTION. For each site where public traffic uses a temporary crossing or a Contractor uses a temporary crossing that is elevated over a public route, construct and maintain the temporary crossing. Remove temporary crossings after use and cleanup the site.

Design temporary bridges, change the preliminary design of approach roads to accommodate temporary bridges, and have an independent design check performed. Inspect and perform quality acceptance on temporary bridges.

520-1.02 DEFINITIONS.

Designer of Record (DOR). A civil engineer registered as a Professional Engineer in the State of Alaska, and in responsible charge of the work described. The DOR must have adequate and relevant prior bridge design and inspection experience. The DOR may delegate portions of design, quality acceptance, and inspection work, to qualified technicians. The DOR and qualified technicians must not be supervised by, or under the direction of the Contractor's temporary crossing superintendent and work crew.

Independent Engineer (IE). An engineer registered as a Professional Engineer in the State of Alaska, and in responsible charge of the independent design check. The engineer responsible for the check must have adequate and relevant prior bridge design experience. The engineer responsible for the check shall not be employed by the Contractor or the same firm as the Designer of Record; or employed by a firm managed or owned by the Contractor or the Designer of Record; nor shall the engineer performing the work manage or own the Contractor or the firm employing the Designer of Record.

Independent Design Check (IDC). An independent design check of the temporary bridge package including but not limited to: design, location and dimensions of the foundation, structural members, connections, erection plan and temporary bracing (when required), safety barrier, and independent calculations of design loads, member stress, material properties, hydraulic capacity and scour protection.

Temporary Bridge. A temporary bridge used by the public or over a public route, including abutments, piers, safety barrier and railing, foundation scour protection, and other incidentals.

Temporary Bridge Package (TBP). Design calculations, working drawings, specifications, and all items identified on Form 25D-080, for a temporary bridge.

Temporary Crossings. A detour route that includes temporary bridges, approach roads and other incidentals.

MATERIALS AND DESIGN

520-2.01 MATERIALS. New or used materials must meet the requirements of the design and the Contract. The DOR must verify the quality of temporary bridge materials before incorporation into the project.

520-2.02 GEOTECHNICAL DATA AND HYDROLOGY REPORT. The Department may provide records of geotechnical investigations. The Contractor is responsible for obtaining all additional geotechnical data necessary for design and construction of the temporary crossings.

The Department may provide a preliminary hydrology and hydraulics report. The Contractor is responsible for obtaining all additional hydrology and hydraulics data necessary for design and construction of the temporary crossings.

520-2.03 TRAFFIC CONTROL PLAN. Submit a traffic control plan for temporary crossing according to the Plans and Section 643.

520-2.04 DESIGN REQUIREMENTS. Retain the services of a DOR to design temporary bridges, and to provide a TBP. When the temporary bridges are used as a construction platform for the Contractor's equipment or workers, then design and construct temporary bridges that are wide enough for the traffic lanes and construction areas, and strong enough to support design traffic and construction loads.

The Department will provide preliminary designs for approach roads. The DOR may change the design of approach roads to accommodate temporary bridges.

1. Design temporary crossings according to the following documents:
 - a. *DOT&PF Standard Specifications for Highway Construction* for recommended material properties, and sampling and testing frequencies and methods.
 - b. *AASHTO LRFD Bridge Design Specifications* for temporary bridge design criteria, as modified by Subsection 520-2.04; and
 - c. *DOT&PF Preconstruction Manual* for design criteria for changes to approach roads.
2. Provide working drawings for temporary bridges including:
 - a. All information and details necessary to construct temporary bridges, including all items listed in Form 25D-080;
 - b. All dimensions controlling the temporary bridge design and erection, including beam length and spacing, post location and spacing, vertical distance between connections in diagonal bracing, height of bents, and similar design controlling dimensions
 - c. All design loads and material properties;
 - d. The soil bearing values;
 - e. The openings required to allow the passage of traffic, including horizontal and vertical clearances, and the locations of railing or barrier;
 - f. Water design flow, opening size and elevations under superstructure, the high water elevation, and the maximum water flow elevation, and the vertical clearances; and
 - g. When a bridge is built over a traveled way show where temporary bracing is used during erection or removal of the bridge, show the sequence of erection and removal, and show details of the temporary bracing used.
3. Design temporary bridges to conform to the following requirements:
 - a. To support 100% of HL-93 live loads or the Contractor's maximum construction load whichever is greater, without overstress. Follow the most recent version, including interim version, of *AASHTO LRFD Bridge Design Specifications*. Indicate governing live load on working drawings;
 - b. Design for half the seismic acceleration value of the permanent bridge shown on the Plans;
 - c. Include the capacities and demands of load-supporting members in the design calculations;
 - d. Provide clear roadway and clear pathway widths equal to or greater than the widths indicated on the plans. Construct the temporary bridge and approach embankments wide enough to provide the widths indicated on the plans, and to safely pass contractor's equipment during all phases of constructing the new bridge. Provide additional width for construction equipment if the temporary bridge will be used as a work platform during the same time that the roadway and pathway are open to the public;
 - e. Design vertical clearance for the life of the temporary structure. A minimum vertical clearance of 16.5 feet is required above a state highway, local road, or street open to the public. A minimum vertical clearance of 23 feet is required above the Alaska Railroad. A minimum vertical clearance of 17 feet is required between the low elevation of the superstructure and (1) the ordinary high fresh water or (2) mean high salt water elevation of navigable waters;

- f. Minimum clearance of one foot between the low elevation of the superstructure and the maximum water flow elevation within your proposed construction opening. Calculate the design water discharge for each temporary bridge;
 - g. To support equipment used to install and remove the temporary bridge, and to construct or renovate the existing bridge. List equipment type, size, capacity, lifting locations, and traffic patterns during lift on the working drawings. Indicate maximum construction loads and locations of applied construction loads;
 - h. Provide a concrete f shape barrier system on the bridge and bridge approaches. Anchor barrier system to prevent deflection when impacted. Locate barrier so outside edge is setback a minimum of 12 horizontal inches from the outside edge of bridge deck;
 - i. Construct roadway surface of concrete or asphalt. Construct bridge deck surface of concrete, asphalt, timber, or steel;
 - j. Design to comply with the requirements of all permits and environmental commitments, including time windows during which work may occur. Apply for and obtain additional permits or modifications to existing permits as needed;
 - k. Do not use existing bridge components on the project site for temporary bridge construction;
 - l. To support loads from utilities identified in the Contract;
4. Design changes to approach roads must conform to permit requirements, and the Department design standards applicable to the design criteria listed on the plans.

520-2.05 DESIGN SUBMITTAL AND REVIEW. Comply with the following:

- 1. Retain a DOR to design temporary bridges and design changes to the approach roads. The design drawings in the TBP must be stamped with the seal of, dated by, and signed by the DOR;
- 2. Retain an IE to perform an IDC; and to stamp with their seal, date, and sign an IDC letter certifying "The TBP meets the AASHTO LRFD Bridge Design Specifications and the Contract requirements"; and
- 3. Submit the IDC letter with three sets of the TBP (except calculations may be one set), and with three sets of design changes to the approach roads, to the Engineer for review and approval at least 30 days prior to anticipated date of beginning construction of the temporary bridge.

520-2.06 VALUE ENGINEERING.

CONSTRUCTION

520-3.01 TRAFFIC MAINTENANCE.

520-3.02 CONSTRUCTION REQUIREMENTS.

520-3.03 WINTER MAINTENANCE.

520-3.04 INSPECTION.

520-3.05 APPROVALS.

520-3.06 CLEANUP.

520-4.01 METHOD OF MEASUREMENT. Section 109

520-5.01 BASIS OF PAYMENT.

STANDARD MODIFICATION**7/28/08****E 61****Replaces E 40****SECTION 608****SIDEWALKS****608-3.03 CURB RAMPS.** *Delete subsection in its entirety and replace with the following:*

Construct curb ramps according to the details and the locations shown on the Plans. Follow the construction requirements of Subsection 608-3.01. Give the exposed concrete surface a coarse broom finish. Install detectable warnings.

Add new subsection:

608-3.04 DETECTABLE WARNINGS. Construct detectable warnings according to the details and the locations shown on the Plans. Install detectable warning tile by embedding tile flanges into cast in place concrete construction so there are no vertical changes in grade exceeding 0.25 inch or horizontal gaps exceeding 0.5 inch. Align pattern on a square grid in the predominant direction of travel. Install the same type of detectable warning tile throughout the project.

Install cast iron, yellow polymer soaked or black asphalt dip finish, with slip resistant surface, with handle or flange on bottom, and with truncated dome pattern; or approved equal.

Detectable warnings shall be manufactured and installed according to the Americans with Disabilities Act Accessibility Guidelines.

608-4.01 METHOD OF MEASUREMENT. *Delete fifth paragraph beginning with: "Curb Ramp" and replace with the following:*

Curb Ramp. By each installation, complete in place, including detectable warnings, ramp runs, backing curbs, flares, and landings necessary to provide a single street-level access.

STANDARD MODIFICATION**1/01/06****E 26****SECTION 615****STANDARD SIGNS****615-2.01 MATERIALS.** *Delete first paragraph of Item 2, including subitems a., b. and c, and replace with:*

2. Sign Fabrication. Use Type IV reflective sheeting (for lettering, symbols, borders, and background) on sheet aluminum panels for all signs except the following:
 - a. Orange Background Signs:
On projects advertised before 1/1/07: Use either Type II or Type III orange reflective sheeting, or use Type VIII or Type IX fluorescent orange reflective sheeting. For temporary installations place reflective sheeting on sheet aluminum, plastic, or plywood panels.
On projects advertised after 1/1/07: Use Type VIII or Type IX fluorescent orange reflective sheeting. For temporary installations place reflective sheeting on sheet aluminum, plastic, or plywood panels.
 - b. Railroad Crossbucks and Vertical Crossbuck Supports: Use white Type VIII or Type IX reflective sheeting for background of sign and all strips.
 - c. Non-Illuminated Overhead Signs with White Legends on Green Backgrounds: Use Type IX reflective sheeting for legends and background. Create the legend in one of the following ways:
 - (1) Cut border and legend from white Type IX reflective sheeting and adhere them to a green Type IX background, or
 - (2) Cut stencil of border and legend out of green transparent acrylic film and use transparent adhesive to overlay the film on a white Type IX reflective background.

- d. Fluorescent Yellow-Green School Area Signs: Use Type VIII or Type IX reflective sheeting for background.

Add the following paragraph:

Reflective Sheeting Warranty. Supply manufacturer's warranty for reflective sheeting, including retention of fluorescent yellow-green (measured in accordance with ASTM E 2301) for ten years according to the following criteria:

Minimum Fluorescent Luminance Factor Y_F : 20%

Minimum Total Luminance Factor Y_T : 35%

The warranty shall stipulate that: If the sheeting fails to meet the minimum fluorescence values within the first 7 years from the date of fabrication, the manufacturer shall, at the manufacturer's expense, restore the sign surface to its original effectiveness. If the reflective sheeting fails to meet the minimum fluorescence values within the 8th through 10th year from the date of fabrication, the manufacturer shall, at the manufacturer's expense, provide enough new replacement sign sheeting to the Department to restore the sign surface to its original effectiveness.

**STANDARD MODIFICATION
E 41**

01/27/07

SECTION 615

STANDARD SIGNS

615-2.01 MATERIALS. *In Item 2.a. Orange Background Signs, add:* Roll-Up Signs: Use 3M series RS 24, Reflexite Marathon Orange, or approved equal (based on durability and reflectivity, as determined by the Engineer). Use flexible signs with fluorescent reflective sheeting that is Type VI or better.

**STANDARD MODIFICATION
E 14**

06/30/04

SECTION 616

THAW PIPE AND THAW WIRES

616-2.01 THAW PIPE. *Second sentence delete:* "and Fittings"

Add the following sentence: Fittings ASTM A 234 galvanized per AASHTO M 111

**STANDARD MODIFICATION
E 42**

01/27/07

SECTION 618

SEEDING

618-3.01 SOIL PREPARATION. *Delete the fourth paragraph and replace with the following:*

Roughen the surface to be seeded by grooving the soil in a uniform pattern that is perpendicular to the fall of the slope. Use one or more of the following grooving methods prior to the application of seed:

1. Manual raking with landscaping rakes;
2. Mechanical track walking with track equipment; or
3. Mechanical raking with a scarifying slope board. Form one inch wide grooves spaced no more than six inches apart.

You may round the top and bottom of slopes to facilitate tracking or raking and to create a pleasant appearance, but you may not disrupt drainage flow lines.

618-3.02 SEEDING SEASONS. Add the following: Seed disturbed areas that require seeding within fourteen days of the permanent cessation of ground-disturbing activities in that area.

Seed between May 15 and August 15, or obtain written approval from the Engineer to seed at a different date.

618-3.03 APPLICATION. Delete first three sentences and replace with: Apply seed mix, fertilizer, and mulch (if required) at the rate specified in the Special Provisions. If no seed mix, seed mix application rate, or fertilizer rate are specified in the special provisions, use the recommendations of the Alaska Department of Natural Resources (ADNR) and the Revegetation Manual for Alaska.

Do not seed areas of bedrock, plant beds, and areas indicated on the plans as “no seeding”.

Water and fertilizer required for application are subsidiary to the Seeding bid item.

Delete Subsection 618-3.04 in its entirety, and add the following new subsections:

618-3.04 MAINTENANCE AND WATERING. Protect seeded areas against traffic by approved warning signs or barricades. Repair surfaces gullied or otherwise damaged following seeding. Maintain seeded areas in a satisfactory condition until final acceptance of work.

Water and maintain seeded areas. Water applied by this Subsection is a paid contract item. If, in the opinion of the Engineer, too much water is being applied, reduce amount of water as directed.

Reseed areas not showing evidence of satisfactory growth within 3 weeks of seeding. Bare patches of soil more than 10 square feet in area must be reseeded. Erosion gullies over 4 inches deep must be filled and reseeded. Fill the entire erosion gully to surrounding grade, even the portions less than 4 inch deep.

Contact ADNR for advice or corrective measures, when seeded areas are not showing evidence of satisfactory growth. You are responsible for retracking, reseeding, refertilizing and remulching areas that do not show satisfactory growth, and those actions are subsidiary.

618-3.05 ACCEPTANCE. During final inspection the Engineer will perform a visual inspection of seeding to determine final stabilization. During the visual inspection each station and each side of the road will be considered a separate area. The Engineer will accept seeding that has become a vegetative matt with 70% cover density in the inspection area.

Reseed areas that are not acceptable to the Engineer.

618-3.06 PERIOD OF ESTABLISHMENT.

Establishment periods extend for one complete growing season following acceptable seeding. Employ all possible means to preserve the new vegetative matt in a healthy and vigorous condition to ensure successful establishment. Reseed areas that do not meet the specifications. Watering and reseeding after the final inspection are subsidiary.

The Engineer may, but is not required to, determine the Project is complete except for the period of establishment, and issue a letter of final acceptance. After final acceptance, work or materials due under this subsection during any remaining period of establishment are considered warranty obligations that continue to be due following final acceptance in accordance with Subsection 105-1.16.

618-4.01 METHOD OF MEASUREMENT.

After Seeding by the Pound, delete text and replace with: By the weight of dry seed acceptably seeded and maintained.

618-5.01 BASIS OF PAYMENT. *Delete paragraphs beginning: "Seeding by the Acre" and "Seeding by the Pound" and replace with:*
Seeding by the Acre. Payment is for established vegetative matt. Soil preparation, fertilizer, and water required for hydraulic method are subsidiary.

Seeding by the Pound. Payment is for established vegetative matt. Soil preparation, fertilizer, and water required for hydraulic method are subsidiary.

Add new pay description:

Water for Seeding. Water applied for growth of vegetative matt. Water for hydraulic seeding, fertilizing or mulching is subsidiary. Water after project completion is subsidiary.

**STANDARD MODIFICATION
E 43**

01/27/07

SECTION 621

PLANTING TREES AND SHRUBS

621-3.04 PERIOD OF ESTABLISHMENT. *Add the following second paragraph:*

The Engineer may, but is not required to, determine the Project is complete except for the period of establishment, and issue a letter of final acceptance. After final acceptance, work or materials due under this subsection during any remaining period of establishment are considered warranty obligations that continue to be due following final acceptance in accordance with Subsection 105-1.16.

**STANDARD MODIFICATION
E 27**

1/01/06

SECTION 640

MOBILIZATION AND DEMOBILIZATION

640-1.01 DESCRIPTION *Add the following:*

6. Comply with the Alaska Department of Labor and Workforce Development (DOLWD) requirements for Worker Meals and Lodging, or Per Diem; as described in their July 25, 2005 memo WHPL #197 (A2) and the State Laborer's and Mechanic's Minimum Rates of Pay (current issue).

Ensure subcontractors comply with the DOLWD requirements.

Ensure facilities meet the Alaska Administrative Code 8 AAC 61.1010 and 8 AAC 61.1040 *Occupational Safety and Health Standards*, 18 AAC 31 *Alaska Food Code*, and U. S. Code of Federal Regulations 29 CFR Section 1910.142 *Temporary Labor Camps*.

Do not consider the cost of Meals and Lodging, or Per Diem in setting wages for the worker or in meeting wage requirements under AS 23.10.065 or AS 36.05.

640-4.01 METHOD OF MEASUREMENT. *Delete the numbered paragraph 3 and substitute the following:*

3. The remaining balance of the amount bid for Mobilization and Demobilization will be paid after all submittals required under the Contract are received and approved.

Add the following:

4. Progress payments for Worker Meals and Lodging, or Per Diem will be computed as equivalent to the percentage, rounded to the nearest whole percent, of the original contract amount earned.

640-5.01 BASIS OF PAYMENT. *Add the following pay item:*

Pay Item	Pay Unit
640(4) Worker Meals and Lodging, or Per Diem	Lump Sum

**STANDARD MODIFICATION
E 15**

06/30/04

SECTION 641

EROSION, SEDIMENT, AND POLLUTION CONTROL

641-1.02 DEFINITIONS. *Item 6. Delete "7" so sentence reads:* Use EPA Form 3510-13.

**STANDARD MODIFICATION
E 52**

05/01/07

SECTION 641

EROSION, SEDIMENT, AND POLLUTION CONTROL

641-2.03 SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN REQUIREMENTS. *Delete first sentence and replace with:* Prepare and implement a SPCC Plan when required by 40 CFR 112, including:

Add the following as the last paragraph of the subsection: You may self-certify the SPCC Plan if your total above ground oil storage capacity is 10,000 gallons or less, and you meet all the requirements for self-certification in 40 CFR 112. Otherwise the SPCC Plan must be certified, stamped with the seal of, dated by, and signed by a Professional Engineer registered in the State of Alaska.

**STANDARD MODIFICATION
E 53**

05/01/07

SECTION 642

CONSTRUCTION SURVEYING AND MONUMENTS

642-3.04 OFFICE ENGINEERING. *Delete third sentence and replace with:* Perform the work by, or under the responsible charge of, a person registered in the State of Alaska as a Professional Land Surveyor or a Professional Engineer.

**STANDARD MODIFICATION
E 62****7/28/08****SECTION 643****TRAFFIC MAINTENANCE****643-1.04 WORKSITE TRAFFIC SUPERVISOR.** *Add Item 3. Authority:*

3. Authority. The Worksite Traffic Supervisor shall have the Contractor's authority to stop work and implement immediate corrective action to unsafe traffic control, in locations where unsafe traffic control is present.

643-2.01 MATERIALS. *In Item 10. Temporary Crash Cushions, delete the second sentence:*

"Do not use permanent crash cushions as temporary crash cushions."

**STANDARD MODIFICATION
E 56****05/01/07****SECTION 643****TRAFFIC MAINTENANCE**

643-2.01 MATERIALS. *Under Item 16. Flagger Paddles, delete last sentence and replace with:* Use reflective sheeting that meets AASHTO M 268 Type VIII or IX. Use background colors of fluorescent orange on one side and red on the other side.

643-3.01 GENERAL CONSTRUCTION REQUIREMENTS. *Add the following:*

Immediately notify the Engineer of any traffic related accident that occurs within the project limits as soon as you, an employee, or a subcontractor becomes aware of the accident.

643-3.04 TRAFFIC CONTROL DEVICES. *In the sixth paragraph and also in Item 4.b., delete: "ATTSA" and replace with: ATSSA (American Traffic Safety Services Association)*

Add the following new Subsection:

643-3.11 HIGH VISIBILITY GARMENTS. Ensure all workers within project limits wear outer garments that are highly visible and comply with the following requirements:

1. Standards.
Use high visibility garments conforming to the requirements of ANSI/ISEA 107-2004, Class 2 for tops or Class E for bottoms, and Level 2 retroreflective material.
2. Labeling.
Use garments labeled in conformance with Section 11.2 of ANSI/ISEA 107-2004; except you may use previously purchased garments labeled in conformance with ANSI/ISEA 107-1999 until 1/1/08.
3. Tops.
Wear high visibility vests, jackets, or coverall tops at all times.
4. Bottoms.
Wear high visibility pants or coverall bottoms during nighttime work (sunset to sunrise). Worksite traffic supervisors, employees assigned to traffic control duties, and flaggers wear high visibility pants or coverall bottom at all times.
5. Outer Raingear.
Wear raingear tops and bottoms conforming to the requirements of this Subsection 643-3.11.

6. Exceptions.

When workers are inside an enclosed compartment of a vehicle, they are not required to wear high visibility garments.

7. Condition.

Furnish and maintain all vests, jackets, coveralls, rain gear, hard hats, and other apparel in a neat, clean, and presentable condition. Maintain retroreflective material to Level 2 standards.

Payment for high visibility garments for workers is subsidiary to other traffic contract items.

**STANDARD MODIFICATION
E 44**

01/27/07

SECTION 644

SERVICES TO BE FURNISHED BY THE CONTRACTOR

644-2.01 FIELD OFFICE. Add the following to the end of the first paragraph: Furnish two private telephone lines for the exclusive use of the Engineer. Furnish a telephone connected to the first line and the second line is to be available for a facsimile machine/dial-up Internet connection. Provide Internet connection with send and receive data capability supporting 56 kilobytes per second or higher data transfer rate.

All long distance calls made by State personnel and the Internet service provider will be paid by the State. Local calls and all connection fees shall be paid by the Contractor.

644-2.02 FIELD LABORATORY. Add the following to the end of the second sentence of the first paragraph: through one week after Project Completion.

Add the following new Subsection:

644-2.06 NUCLEAR TESTING EQUIPMENT STORAGE SHED. Design, furnish and maintain a weatherproof, heated, and ventilated nuclear densometer/testing equipment storage shed for the Engineer to use exclusively throughout the contract. Install the building at least 15-feet from an occupied area at a location approved by the Engineer. Install the shed before commencement of construction activities and maintain it until one week after project completion. Provide sufficient floor area for the nuclear testing equipment and a portable electric heater to maintain a minimum room temperature of 50 °F in freezing weather. Design the building with enough floor area to provide sufficient clearance between the equipment, heater, and combustibles. Provide a commercial grade metal-clad exterior entrance door of 3'-0" min width by 6'-8" height with dead-bolt lockset. Hang the door so that hinge pins are not accessible from the exterior. Provide the Engineer with 2 keys to control access. Provide a 5/16" x 10 foot long welded steel security chain securely attached inside the structure with tamperproof hardware for the Engineer to secure the testing equipment. Provide 120-volt, 60-cycle power, an interior light, and a wall receptacle for the heater. Secure the structure to the ground with tamperproof anchors to resist wind loads and prevent unauthorized movement of the building. The nuclear testing equipment storage shed remains the property of the Contractor. Remove the shed from the site following project completion.

Add the following new Subsection:

644-2.07 STORAGE CONTAINER. Furnish, transport and maintain a weathertight, lockable, steel enclosed 20 foot long X 8 foot wide X 8 foot high wooden floored container for the storage of the Department's materials, supplies and testing equipment (but not nuclear equipment). Provide twenty equally spaced fastening points on the interior walls that are capable of securing the Department's contents. Door opening dimensions of the storage container shall be greater than 60 square feet. Supply necessary equipment to lift and move container with minimal disturbance to the Department's contents. The container shall not be moved by skidding or hook lift. The Contractor shall be listed as the shipper on all documents listing and acknowledging receipt of the Department's goods for shipment.

Deliver an empty and clean container to the Regional Materials Laboratory, or location acceptable to the Engineer, three weeks prior to transporting to the project site. Allow 7 days for the Department to load the container. Transport the loaded container to the project site. Set up container at a location approved by the Engineer prior to commencing construction work.

1. Provide electrical service and other facilities as follows:
 - a. Electrical current, 120V (ac), 60 cycle on a 24 hour a day basis;
 - b. Wiring system to support a 20 amp user load demand;
 - c. Two GFI protected outlets conveniently spaced on the interior walls;
 - d. Four 100 watt incandescent or eight 40 watt fluorescent lights located for maximum illumination; and
 - e. Provide a stairway with railing, built to meet the International Building Code, if there is more than 12-inch difference in floor entry and existing ground elevation.

Return the container to the Regional Materials Laboratory, or location acceptable to the Engineer, upon project completion. Allow 7 days for the Department to unload the container. The storage container remains your property after you complete the work.

644-3.01 METHOD OF MEASUREMENT. Add the following items:

Nuclear Testing Equipment Storage Shed. By the number of storage sheds specified, to include all components, installed and accepted as completed units and ready for equipment storage.

Storage Container. By the number of storage containers specified, to include all components, installed and accepted as completed units and ready for materials and equipment storage.

644-4.01 BASIS OF PAYMENT. Add the following items:

Lump Sum Items. Payment for lump sum items will be made as follows:

1. A percentage of the lump sum amount, to be determined by the Engineer, will be paid as full compensation for furnishing the facility at the site.
2. The balance of the lump sum amount will be prorated over the anticipated active construction period with a portion included as part of each interim payment, for maintenance, repairs, providing all utilities, and for removing it from the site. If anticipated construction period changes, the final increment will be held until final payment.

Nuclear Testing Equipment Storage Shed. At the contract unit price to include all labor, materials, tools, equipment and supplies required to furnish and install the shed before commencement of construction, to maintain it for the duration of the project and to remove the shed and electrical service after project completion. Electrical service and utility costs are subsidiary to this item.

Storage Container. At the contract unit price to include all labor, materials, tools, equipment and supplies required to deliver the storage shed to the regional office for loading, to deliver it to the project office, to install it before commencement of construction, to maintain it for the duration of the project, to remove the shed and electrical service after project completion, to deliver it to the regional office for unloading, and to remove the storage shed. Electrical service and utility costs are subsidiary to this item.

Add to Pay Items:

Pay Item	Pay Unit
644(15) Nuclear Testing Equipment Storage Shed	Each
644(16) Storage Container	Each

**STANDARD MODIFICATION
E 30**

3/15/06

SECTION 701

HYDRAULIC CEMENT

701-2.03 GROUT. *Add to end of last sentence:* from specimens made in accordance with ATM 507.

**STANDARD MODIFICATION
E 63**

7/28/08

SECTION 706

CONCRETE AND PLASTIC PIPE

706-2.06 PLASTIC PIPE. *Delete the first sentence and replace with the following:*
Semi-rigid, smooth-wall pipe meeting the following:

**STANDARD MODIFICATION
E 17**

06/30/04

SECTION 707

METAL PIPE

Delete Subsection 707-2.07 and replace with the following:

707-2.07 GALVANIZED STEEL WATER CONDUIT. Meet the following:

Galvanized Pipe ASTM A 53 or ASTM A 120, galvanized per AASHTO M 111
Galvanized Fittings ASTM A 234 galvanized per AASHTO M 232

**STANDARD MODIFICATION
E 31**

03/15/06

SECTION 710

FENCE AND GUARDRAIL

710-2.03 CHAIN LINK FABRIC. *Add to parentheses in first sentence:* (Class C or D coating)

**STANDARD MODIFICATION
E 64**

7/28/08

SECTION 710

FENCE AND GUARDRAIL

Delete Subsection 710-2.04 and replace with the following:

710-2.04 METAL BEAM RAIL. Meet AASHTO M 180, Class A, Type II. Galvanize after fabrication. Fabrication includes forming, cutting, shearing, punching, drilling, bending, welding and riveting.

710-2.11 GUARDRAIL TERMINALS. Add the following as the first paragraph: Meet coating requirements of AASHTO M 180, Class A, Type II. Galvanize after fabrication. Fabrication includes forming, cutting, shearing, punching, drilling, bending, welding and riveting.

STANDARD MODIFICATION
E 46

01/27/07

SECTION 712

MISCELLANEOUS

712-2.06 FRAMES, GRATES, COVERS, AND LADDER RUNGS. In Gray iron castings, delete text and replace with: AASHTO M 306 and AASHTO M 105, Class 35B.

STANDARD MODIFICATION
E 47

01/27/07

SECTION 719

STEEL, GRAY-IRON AND MALLEABLE-IRON CASTINGS

719-2.02 GENERAL REQUIREMENTS. In Gray-Iron Castings, delete text and replace with: AASHTO M 306 and AASHTO M 105, Class 35B

STANDARD MODIFICATION
E 54

05/01/07

SECTION 740

SIGNALS AND LIGHTING MATERIALS

740-2.02 SIGNAL AND LIGHTING STRUCTURES. Within Item 1, delete paragraph two and replace with:

All working drawings and calculations must be stamped with the seal of, dated by, and signed by a Professional Engineer registered in the State of Alaska. Submit the working drawings and calculations for each pole to the Engineer for approval. Design for all stresses on the completed structure with all hardware in place. Show the design wind loads, projected areas, wind drag coefficients, material properties, and other design information on the working drawings. Include a summary of the loads used in each pole's design.

STANDARD MODIFICATION
E 48

01/27/07

SECTION 743

FUEL TANK

743-1.01 DESCRIPTION. This item consists of furnishing and installing a protected aboveground motor vehicle fuel or heating oil tank complete with fuel and accessories as specified. Prepare for Department use, an Environmental Protection Agency (EPA) approved Spill Prevention, Control and Countermeasure Plan (SPCC plan).

MATERIALS

743-2.01 TANK. Provide skid-mounted, doublewall, aboveground steel tank. The tank shall be of the type and capacity shown in the bid schedule. Equip tank with accessories as shown on the Plans and as follows:

1. **Overfill Alarm.** Provide a mechanical, audible overfill alarm, Ventalarm Signal as manufactured by Scully Signal Company, 70 Industrial Way, Wilmington, MA 01887 or approved equal.
2. **Automatic Shut-Off Device.** Provide a positive closing, mechanical, automatic shut-off device. Clay & Bailey model F-30 as manufactured by Clay and Bailey Manufacturing Co., 6401 East 40th Street, Kansas City, MO 64129 or approved equal.
3. **Tank-Mounted Mechanical Fuel Gauge.** Provide mechanical gauge with 12-hour clock face in feet and inches readout, activated by a stainless steel float connected to a stainless steel cable. Morrison Model 818 as manufactured by Morrison Bros. Co., P.O. Box 238, Dubuque, Iowa 52004 or approved equal.
4. **Openings.** Provide the following threaded openings and accessories on tank top:
 - a. One 2-inch Interstitial Monitoring with plug
 - b. One 2-inch Normal Vent with screen
 - c. One 2-inch Product fill opening with locking cap
 - d. One 2-inch Product pump opening with plug
 - e. One 2 to 4-inch Liquid level gauge
 - f. One 4 to 8-inch Emergency vent with plug, primary tank
 - g. One 4 to 8-inch Emergency vent with plug, secondary tank
 - h. No Drain Opening at bottom
5. **Exterior Coating.** Abrasive blast the exterior surface of the outer tank according to SSPC-SP 6. Coat the exterior surface with 8 mils total thickness of epoxy paint base and urethane paint finish.
6. **UL Labeling.** Heating oil tanks shall be manufactured and labeled according to UL 142. Motor vehicle fuel tanks shall be manufactured and labeled according to UL 142 and UL 2085.
7. **Insulation.** For motor vehicle fuel tanks install 3-inch thickness of insulation according to ASTM C-332 and ASTM C-495.

When a motor vehicle fuel-dispensing tank is specified, it shall meet or exceed the requirements of UL 2085, Underwriters Laboratories Standard for Safety for Protected Aboveground Tanks for Flammable and Combustible Liquids. Equip with a threaded opening for the specified fuel pump.

Tanks larger than 2,500 gallons require additional openings and accessories for UL rating.

743-2.02 MANUAL DISPENSING SYSTEM. Provide a double-action pump, equipped with detachable, self-venting bung adapter, set screws and strainer screen. Provide a dispensing system that is not gravity fed. The pump shall have 16 feet of ¾-inch diameter arctic service fuel hose with shut-off nozzle and deliver a minimum of 20 gallons/100 strokes. The pump supplied shall be a Gasboy, Model 1720, or approved equal.

743-2.03 ELECTRIC DISPENSING SYSTEM. Provide an electric suction or submerged turbine pump with a delivery rate up to 18 gpm, 3-wheel, meter-register with reset and non-resettable 6 digit master

totalizer in a cabinet, anti-siphon valve with internal pressure relief, gate valve, canister style fuel filter, flow meter, 20 ft arctic service fuel hose with swivel and breakaway coupling, hose retractor, OPW 11-A automatic nozzle with lockable nozzle holder, explosion proof pump activation switch, emergency pump shutoff switch mounted on the SRE building, warning signs, and BC fire extinguisher per International Fire Code (IFC) chapter 2201 – 2206.

743-2.04 FUEL. No. 1 diesel or No. 1 heating oil, depending on tank use.

CONSTRUCTION REQUIREMENTS

743-3.01 INSTALLATION. Install according to the International Fire Code (IFC) chapters 22 and 34 for the type of tank specified. Mount and secure the tank on the skid base. Install dispensing system to include all fittings and hose. Install wiring of the pump and emergency shut off according to National Fire Protection Association (NFPA) 30 and the current edition of the National Electrical Code (NEC) for hazardous locations. Place tank at the location shown on the Plans, or as directed. Set automatic shut-off device to 90% capacity. Fill to 90% capacity with specified fuel.

743-3.02 SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC). Provide for Department use after tank installation, an EPA approved SPCC plan for the motor vehicle fuel or heating oil tank, that is certified by a licensed professional engineer. (See <http://www.epa.gov/oilspill/lawsregs.htm> for SPCC plan requirements).

Comply with 40 CFR 112 and address the following issues in the SPCC Plan:

1. Operating procedures that prevent oil spills;
2. Control measures installed to prevent a spill from reaching navigable waters; and
3. Countermeasures to contain, clean up, and mitigate the effects of an oil spill.

The Contractor shall coordinate with the Department to identify oil spill response resources. The SPCC Plan shall take into account the Department's on-site equipment, oil spill containment material, cleanup material, and personnel; and shall make recommendations for future improvements in these areas.

Provide two (2) copies of the SPCC Plan; deliver one to the Engineer to be retained at the site and deliver the other to the Department's Statewide Safety Officer at 5300 E. Tudor Drive, Anchorage, AK, 99507.

743-4.01 METHOD OF MEASUREMENT. Subsection GCP-90-02 and as follows:

1. Lump Sum. No measurement of quantities will be made.
2. Unit Prices. The quantity to be paid for will be the number of units installed, complete, in place, accepted, and ready for operation.

743-5.01 BASIS OF PAYMENT. At the contract unit price for the pay items listed below that appear in the bid schedule. Heating fuel distribution and delivery systems are measured and paid for under other Sections or by Special Provision.

Payment will be made under:

Pay Item	Pay Unit
743(1) Heating Fuel Tank [Capacity in gallons]	Each
743(2) Fuel	Lump Sum
743(3) Manual Dispensing System	Each
743(4) Electric Dispensing System	Each
743(5) Motor Vehicle Fuel-dispensing Tank [Capacity in gallons]	Each
743(6) Spill Prevention Control and Countermeasure Plan	Lump Sum